

## **ELECTRICAL & ELECTRONICS** ENGINEERING

# Department Seminars

#### THE DEVELOPMENT OF BIOSENSOR DEVICES FROM IDEATION INCEPTION TO STARTUP INITIATIVES

by Prof. Robert S. Marks

#### Abstract

Some years ago it was clear that Point-of-Care devices would be needed with the increase in interest of diagnostics in our society. Thus, sprang the interest in biosensors, biochips and lab-ona-chip. With time it became clear that this interest was compounded by the consumerism that found synergy in the rapid progress in mobile communication, 5G, data mining, artificial intelligence and Big Data. This quantum leap has brought renewed interest in our field of biosensors. We will describe here the various techniques we have developed in the field of biosensors, as well as, their applications. We will mainly focus on fiber-optic immunosensors and genosensors. In addition, we will describe our progress in innovating in the field of lateral flow immunoassays. We will also describe attempts to commercialize our developed technologies. Some of our publications can be easily found in <a href="https://www.researchgate.net/profile/Robert-">https://www.researchgate.net/profile/Robert-</a> Marks-7.

Biography: Prof. Robert S. Marks is a Full Professor and chair at the Ben-Gurion University of the Negev, Israel, at the Department of Biotechnology Engineering, where he created the interdisciplinary Biosensors Laboratory, and has affiliations there at The National Institute for Biotechnology in the Negev and the Ilse Kats Centre for Nanotechnology. Prof. Marks has co-founded, and is the originator of the technologies, for the following companies in Israel, Biosensing Technologies Ltd, Biopixel Ltd, Polyrizon Ltd, Neobionics Ltd. The present startups are Life Matters Ltd (Israel), Biosensorix Pte Ltd (Singapore) and Eclipse diagnostics (USA).



### Date and Time: 19 March 2021, 17:00

Place: Zoom Meeting ID: 979 4143 7632 Password: 565788